Genetic ancestry testing, whiteness and the limits of anti-racism

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Abstract

This article explores how a branch of genomic science that embraces and advocates anti-racism, public participation, consultation and inclusion unintentionally supports everyday discourses of race and racism. It focuses on the reproduction of racism and exposes the limits of anti-racist discourses that are embedded in public engagements with the science and technology of genetic ancestry testing. I deploy a case study which is centred on the analysis of commentaries posted on the internet which were written in response to a newspaper article that criticised the science of genetic ancestry testing. This article was published in *The Daily Telegraph,* a broadsheet 'quality' newspaper in the UK. I analyse the ways in which ideas and images of British indigeneity and shared human descent that support white Western racial hierarchies, power and privileges emerge in the posts that responded to the newspaper article.

Keywords: race, nation, whiteness, Britishness, indigeneity, science

Introduction

Population geneticists have identified genetic markers with populations, that is, groups of individuals that map onto geographical areas (Jobling et al, 2016: 142). These genetic markers can most easily be identified in the Y-chromosome inherited only by men from their fathers, or the mitochondrial DNA inherited by both men and women through the maternal line (Jobling et al, 2016). These

genetic markers can also be identified in autosomal markers that are inherited from both parents (Bolnick et al, 2007).

Since 2000, there has been a rapid expansion in commercial companies that have mobilised this science to sell direct-to-consumer genetic tests that offer information about individual ancestries (Abu Al Haj, 2012: chapter 4). These tests analyse large collections of genetic markers (Royal et al, 2010). Each individual's genome is then mapped 'as a mosaic of segments inferred to be derived from' an ancestral population (Royal et al, 2010: 655). The most common test taken today is the autosomal DNA test that allows individuals to trace their purported genetic ancestry to a variety of groups. This is achieved by comparing test results to patterns of variation in pre-defined reference groups in order to partition the customer's ancestry into fractions or percentages of resemblance to those ancestry groups (Jobling et al, 2016; Royal et al, 2010). Thus, for example, the results reported to the consumer testing autosomal markers from both parents 'typically estimate admixture proportions from several populations, most often Africans, Europeans, Asians, and Native Americans' (Royal et al, 2010: 668). Consumers can purchase a range of tests that explore their connections via genetic ancestry, such as 'the Native American ethnicity DNA Test', the 'European ancestry DNA test', (Royal et al, 2010), 'the Cohanim Modal Haplotype Test', 'the Hindu Test' and the 'Genghis Khan Test' (Schramm et al, 2012: 9).

Human population geneticists have been integral to the development of the rapidly expanding commercial sector of genetic genealogy (Nash, 2015). While the respective sample databases, goals and test resolutions are different for commercial and research projects, ancestry testing companies and

university research projects rely on each other's 'technological capacities' and 'expertise' (Abu Al Haj, 2002: 148; Royal et al, 2010: 661). Notwithstanding this close relationship between scientific research and the commercial sector of genetic genealogy, there is a debate amongst geneticists about the reliability of direct-to-consumer genetic ancestry tests (see Abu El-Haj, 2012: 151-159 for an overview of these debates). For example, Jobling, a Professor of Genetics at the University of Leicester, and his co-authors argue that: '…genetic methods based on the study of groups of individuals (populations) are reliable and respectable scientific tools, but … the practice of individual genetic ancestry testing is unreliable and powerfully influenced by cultural and other social forces' (2016: 143). Significantly, for these geneticists the latter includes the mistaken mapping of ancestry not onto populations but racial categories (2016: 143). It is precisely the companies' claims to be able to map individuals' ancestries onto ethnic and racial origins that has led many geneticists to be sceptical of the validity of these tests (Bolnick et al, 2007; Royal et al, 2010; Abu Al-Haj, 2012: 151). In response to this criticism the geneticists involved in the commercialisation of this technology point out that the companies do explain to customers that there is an 'imperfect correlation' between 'genetics, race and geography' (Abu Al-Haj, 2012: 152). Nonetheless, some geneticists have joined critical social scientists to question the impact of these tests on ideas about the biological constitution of race and question the ethics of the commercialisation of this science (Bolnick et al, 2007; Greely, 2008; Royal et al, 2010).

In this article I shall focus on public responses to one such critique of these tests made by genetic scientists reported in an article in *The Daily Telegraph* newspaper, a broadsheet (i.e. 'quality') newspaper in the UK (Collins,

2013). *The Telegraph* article was written by the newspaper's science correspondent Nick Collins. This article reported the deep misgivings expressed by eminent population geneticists about the ethics of the commercialisation of genetic ancestry tests. They questioned their accuracy for tracing the racial, ethnic and national descent of the user, suggesting that the findings of the tests are not supported by scientific evidence. I shall set out the details of this newspaper article in the empirical sections below.

The case study that I shall develop here is centred on public reaction to this newspaper article articulated in contributions to the comments section that follows the on-line version of the article. I will highlight how some commentators sought to defend the ability of the tests to identify ancestries of racial, ethnic and national descent. My analysis of these comments – that I refer to as 'posts' - will show that it consists of two groups. One group of posts claims the weight of science in support of an image of Britishness as entwined with white Nordic European origins, and the other group advances an apparently opposing image of the common descent of humanity from African origins. I shall refer to the former as 'the discourse of British indigeneity' and the latter as 'the discourse of shared human descent'.

My reading and analysis of this commentary section allowed me to see and explore how some of the cultural images and scripts articulated in the posts resonate and chime with the popular depiction of the science of genetic ancestry testing in the media. In particular, I shall demonstrate how those posts that I identify as discourses of 'British indigeneity' evoke scripts and images that reflect aspects of the media dissemination of Walter Bodmer's work (see Cross, 2001; Fortier, 2012; Nash, 2013, 2015). Bodmer is an Oxford-based population

geneticist whose research set out to trace the origins of ancient British ancestry and descent and has been widely publicised in television documentaries and in popular books (Nash, 2013). Also, I contend that some of the ideas in the posts that comprise the discourse of 'shared human descent' resonate with the US-based Genographic Project sponsored by the *National Geographic* (see Nash, 2007, 2015; Reardon and Tallbear, 2012). This project is one of the most publicised and well-known research projects on human population genetics (Nash, 2007). One strand of this project used blood samples taken from particular populations of 'indigenous' people (Nash, 2007), also referred to as 'First Nation' (Tallbear and Reardon, 2012) people, with the aim of mapping humanity's genealogical history and origins.

The population geneticists working on these high-profile research projects are adamant that their work is resolutely anti-racist in its approach to genetic science and genealogy (Nash, 2015; Reardon and Tallbear, 2012). But in stark contrast to this assurance, my analysis of the commentaries reveals that the logics of indigeneity underpinning these projects feed into commentators' posts in ways that support ideas of Britishness, difference, genetic and genealogical belonging that are racist and nationalist, albeit no doubt, unintentionally so. I will be exploring how images and ideas from 'liberal anti-racist genomics' (Reardon, 2012) that aim to be 'democratic' (Fullwiley, 2014: 803) in terms of public engagement and anti-racist with regard to ideas of human similarity and difference reoccur in everyday discourses to support ideas and practices that have xenophobic, nationalist and racist implcations (see also Ifekwunigwe et al, 2017; Wagner et al, 2017). To make this argument I shall draw on sociological, anthropological and geographical critiques of the popular

dissemination of Bodmer's work (e.g Cross, 2001; Fortier, 2012; Nash, 2013, 2015) and the Genographic Project (Nash, 2007, 2015; Reardon and Tallbear, 2012). It will become clear that the social scientific critique of these projects affords a perspicuous set of theoretical concepts and frameworks through which to analyse the construction of difference in commentators' accounts.

However, my case study also brings a new perspective to the existing social scientific critiques. Read collectively these critiques focus solely on the popular dissemination of Bodmer's work and the Genographic Project in books and television documentaries. My case study extends this body of work by illustrating how the ideas, images, scripts and icons from these high-profile projects are reproduced in the everyday accounts of individuals who do not self-identify as scientists.

It is worth highlighting that my focus on a British-based case study is significant because most of the research on the everyday connections that lay people make between ideas of science, ancestry, race and ethnicity is conducted in the USA. For example, there is a growing body of qualitative work in the USA on the ways in which ideas of racial and ethnic identification inform how American test-takers across ethnic, racial and religious identities interpret their genetic ancestry test results in ways that are meaningful to them (see Abu El-Haj, 2012 on Jewish American experiences; Tallbear, 2013 on Native American experiences; Nelson, 2016 on African American experiences; Roth and Ivemark, 2018 on white American experiences; Panofsky and Donovan, 2019 on white nationalist experiences). These studies highlight how nationally specific colonial and slave histories and ideologies of race, nation, citizenship and multiculturalism shape people's interpretations of genetic ancestry tests.

Given the specific histories of empire, slavery, race, nation, immigration and multiculturalism that have formed and continue to shape the UK and its ethnically diverse citizenry, my case study provides insight and data on the diverse ways in which genetic ancestry tests are interpreted in the context of postcolonial Britain.

While I have found studies on genetic ancestry based in the USA and elsewhere insightful, my focus on the British context is particularly significant. This is because there is a dearth of work that explores how ideas of race and ethnicity mediate everyday engagements with genetic ancestry in the UK. For example, Scully et al (2013, 2016) trace the ways in which white men with ancient-sounding surnames from the north of England receive information about their supposed Viking ancestry. The focus of this study is *not* on what they call the 'high stakes' involved in taking these tests, including questions of racial and ethnic identification (Scully et al, 2016: 164). Rather, their emphasis is on how test results become incorporated into what test-takers already know about their family history and their sense of local and national identity. As will become apparent, the specifically British racialised histories of empire and slavery, as well as contemporary articulations of multiculturalism and immigration, including images that have become associated with Brexit, inform how the commentators that feature in my case study engage with the general science of the tests.

Before I get to the details, some further reflection is needed on how the social scientific critique of high-profile genetic projects applies to the analysis I will provide.

Analytical framing: genetic projects in the media

Given my focus on the limits of anti-racism discourse embedded within the popularisation of genetic science (see also Reardon, 2012), it is useful to discuss in a little more detail how scholars that study Bodmer's work and the Genographic Project discuss the ways in which this work is motivated by anti-racist agendas (Cross, 2001; Tutton, 2004; Nash, 2007; Fortier, 2012; Reardon and Tallbear, 2012). The Genographic Project tries to show that the DNA shared across so-called racial groups renders the idea that racial difference is biologically grounded is false (Nash, 2007: 80), thereby demonstrating how all humans belong to just one giant 'family' (Nash, 2015: 91-92). Nash (2013) also shows how Bodmer's project, titled '*the People of the British Isles*', reinforces the idea that Britain is a genealogically diverse nation to the extent that all Britons are migrants from somewhere else. This renders British populations 'mixed-up', an image of diversity that chimes with contemporary multicultural sensibilities in the UK (Nash, 2013: 198; see also Nash, 2015: 116). However, read in the round, social scientific criticism of these projects brings to the fore how the anti-racist ethos underpinning this research nevertheless reproduces – albeit unintentionally - hierarchical racial, ethnic and national differences that support white power and privilege (Cross, 2001; Tutton, 2004; Reardon and Tallbear, 2012).

For example, with reference to Bodmer's research and its public dissemination, Tutton (2004), Cross (2001), Fortier (2012) and Nash (2013) have each shown how ideas about the heterogeneous constitution of ancient British ancestries as 'Celtic', 'Viking', 'Anglo-Saxon' and 'Jute' nevertheless implies that they are racially white by virtue of their supposed Nordic and

European descent. Significantly, the mapping of British indigeneity in Bodmer's research rests on the sampling of white Britons from rural and isolated areas of the UK that can claim four generations of grandparents who have lived in the same locale (Fortier, 2012: 160). The rationale here is that these populations are thought to have undergone little in-migration and thus their ancestry is deemed to reflect the genealogical constitution of ancient descent (Fortier, 2012: 160). For Bodmer and his team, this sampling strategy is '*not* aligned with any idea of racial, cultural or genetic purity' (Nash, 2015: 128, my emphasis) but rather follows standard scientific practice. Sociological commentators have reflected on why ethnic minorities are not included in Bodmer's sample (Cross, 2001; Fortier, 2012). Bodmer and his team suggest that given their focus on ancient ancestries of descent ethnic minority Britons' ancestry relates '… to the country of origin, not to the British Isles' (Bodmer, 2006: 11 cited in Fortier, 2012: 160). Therefore it is deemed that it would be more logical for research to be conducted in ethnic minorities' ancestral homelands of India, China, Pakistan, and so on (Nash, 2013: 202, 2015: 128).

While geneticists argue that this standard scientific practice enables them to disclose how the British Isles were initially inhabited, sociological critics have shown the varied ways in which this focus on the ancient past becomes deeply problematic when put into the context of contemporary multicultural Britain (Cross, 2001: 424-27; Fortier, 2012). In this vein, sociologists illustrate how, in the dissemination of Bodmer's work, racially and culturally marked British ethnic minorities are excluded from the heart of the national story of Britishness, ancestry and descent. Cross (2001: 423) and Fortier (2012: 161) suggest that geneticists' focus on the ancient past serves to displace and

render invisible the more recent postcolonial legacies of Britain's multiracial slave and colonial histories, including the political economies of recent global migrations, in shaping the genealogies of contemporary Britons and Britishness.

By contrast with Bodmer's focus on 'indigenous' Britons, the Genographic Project draws on a notion of indigeneity that is identified with non-Western 'First Nation People' whose land was colonised by white settler communities including of course white Britons (Reardon and Tallbear, 2012). Nevertheless, again in line with standard scientific practice, and like Bodmer's sampling of rural British populations that have experienced little in-migration, the Genographic Project's 'First Nation' populations are said to be 'relatively isolated from immigration from surrounding groups' (Reardon and Tallbear, 2012: 237), and their 'genetic lineages' representative of the 'ancient history' of the populations studied (Genographic Project, 2005: 12 cited in Reardon and Tallbear, 2012: 237). Also resembling the structures of amnesia over the colonial past embedded within aspects of the dissemination of Bodmer's work, this is a worldview of 'the human journey' where there is no recognition of shared slave and colonial ancestries of descent and subsequent global migrations. All the emphasis is on 'prehistoric journeys out of Africa' (Nash, 2007: 82) some 60,000 years ago that are thought to provide the genealogical kinship uniting humanity. For Nash (2007) the effect of this narrative of common human descent is to 'figure Africa as not only the location of ancient origins but as the place of the contemporary primitive' (2007: 82).

It is also worth thinking about the conception of science underpinning both the Genographic Project and Bodmer's research, and its popularisation. Cross (2001: 422) argues that underlying the construction of whiteness in

Bodmer's work is a purportedly 'benign and sovereign view of biology' that 'is portrayed as existing in separation from culture' (2001: 423), a worldview that feeds into Western notions of scientific 'objectivity and neutrality' that is itself 'historically and culturally contingent' (Cross, 2001: 423; see also Harding [2008]; Said [1978] for this view of science more generally). Similarly, Reardon and Tallbear (2012: 238) argue that in the Genographic Project: 'concepts of whiteness tie closely to ideas of modernity and rationality … and then to science'.

Reading the posts of my case study through the lens of the foregoing social scientific critique of these genetic projects, I will pay detailed attention to the enactment of notions of primordial indigeneity, the displacement of multiracial slave and colonial histories, and ideas of scientific neutrality and objectivity. I shall advance and develop this critique by exploring how these discursive tropes become integrated into the commentators' views on multiculturalism, racial, ethnic and national difference, politics and science that maintain and reproduce white racial hierarchies, power and privilege.

Methodological framings

I came across the newspaper article and the commentators' responses to it during months of surfing the internet for insight into the British public's engagement with genetic ancestry testing to inform new research I was developing on this topic. This research included reading the websites of companies that sell genetic ancestry tests to the public. I also read the websites of family history organisations because these tests have been specifically marketed at people interested in tracing their family history research (Abu Al

Haj, 2012). In addition to this, I attended a number of events that were aimed at introducing these tests to the general public. It is noteworthy that I conducted this research in 2012-13. Since that time the number of companies offering genetic ancestry tests in the UK has increased substantially, as has their advertisement via television, internet and social media, and their prices have fallen.

In the pursuit of my project, these commentaries jumped out at me because they spoke directly to my interests in the ways in which ideas of racial, ethnic and national difference mediate everyday engagements with genetic tests. This is a theme I did not find explicitly discussed in my other lines of inquiry. The latter mostly focussed on the potential of these tests to contribute to the tracing of ancestors. Indeed, as a social anthropologist used to analysing qualitative interview data, it also struck me that analysis of this commentary was particularly important because some of the blatantly racist and nationalist posts represented attitudes and beliefs that individuals might not divulge in an interview. In this regard, this case study illustrates how the anonymity of the internet offers a space for individuals to voice racist and nationalist views that would not be acceptable in other public spaces (see also Gilroy, 2012).

This newspaper article gave rise to 130 posts in the days following its publication. These posts on the newspaper site ranged from one-line comments to several paragraphs of text, and each post received between 0-60 ‘recommendations’ from other readers, with most posts receiving between 1-10 recommendations. *The Telegraph* is traditionally read by people that are more likely to be ‘right-of-centre’ and conservative people. The commentary section is moderated by the newspaper and the postings were completely open access.

However, at the time of writing the posts have been removed and cannot be found via google.

The posts included a lively discussion about the reliability of these tests including serious observations on the technicalities of this science such as reflection on: a) the importance of using a reputable testing company; b) the importance of combining test results with data gathered from family history research; c) the differing ways in which DNA data is interpreted by scientists. The posts also included a humorous discussion about the possibility of discovering that 'we are all related to' British politicians; as well as good hearted banter on what happens if you find out your family is originally from an unfashionable place in Britain. There was also a humorous discussion about being 'descended' from what one finds in the loft, such as 'cooking fans, an acoustic guitar with 4 strings…'. Dispersed throughout these discussions I identified posts reflecting 'the discourse of shared human descent' and others reflecting 'the discourse of British indigeneity'. These themes did not dominate the thread but reoccurred and were interwoven throughout it. As I have noted above, they were the most interesting to me and thus stood out.

Following Hine's (2000) assertion that ethnographic and qualitative methods should be applied to internet research, I confidently analysed these commentaries in a similar fashion to the way that I do qualitative interview material. I read the posts as discourse: that is to say, social practices that comprise the values and worldviews of particular groups of people. The posts are thus more than just random and idiosyncratic views of individuals who write their opinions on the internet. They are, rather, widespread social practices that have specific goals, consequences and effects. In my analysis, I trace how

ideas of history, politics, science, geography and multiculturalism were put into relation with each other to evoke ethnic, racial and national differences through a kind of ‘absent presence’ (M’Charek et al, 2014).

Turning to the ethics of engaging with this internet activity, I believe that the posts are legitimately susceptible to critical sociological attention because they have been posted by their authors precisely for the purpose of generating public engagement and discussion. Like many researchers who analyse this type of publically available material, I did not seek consent from the commentators to subject their writings to detailed analysis (Hookway, 2008). In an attempt to negotiate this, and in line with accepted practice in both internet and ethnographic research (Hine, 2000), I have made every attempt to anonymise the identities of the commentators whose words feature in this article, for example by using pseudonyms to name the commentators.

The posts that I have selected for discussion here have been chosen because they are good representations of the discourses of British indigeneity and shared human descent. I have purposefully included lengthy extracts from this select sample of posts. This is in part to allow the reader to draw out their own interpretations of the posts. I also understand the language, tone and style of the posts to be integral to the underlying message. Hence, at times, I interrogate the meaning of key words and phrases. In some cases, due to limited space, I have not presented the whole post but have made sure that I have conveyed its central point. I have also listed the number of recommendations that each post receives from readers of the posts to indicate the wider influence of the post on the public. While I draw on a select sample of posts, my account is informed by my wider analysis of the entire set of posts.

Empirical analysis

Details on the newspaper article: 'DNA ancestry tests branded "meaningless"'

I begin by prefacing my analysis of the posts with the specific details of the newspaper article featured in *The Daily Telegraph* that provoked them. The newspaper article written by their science correspondent (Collins, 2013) drew on comments by *the Sense about Science* campaign group. The latter claimed that the science underpinning commercial genetic ancestry testing is 'meaningless' for identifying significant information about individual ancestries, and that this is a commercial enterprise to make money from a naïve public. Indeed, the scientists referred to in the newspaper article characterised the claim that commercial genetic ancestry tests can show the user that they are descended from Vikings as mere 'genetic astrology'.

The *Sense about Science* campaign group are quoted as saying 'such histories are either so general as to be personally meaningless or they are just speculation from thin evidence'. Steve Jones, Emeritus Professor of Human Genetics at University College London and a popular media figure who specialises in public understandings of science, emphasises the vagueness of these tests for locating racial, ethnic and national ancestries. He is quoted in the newspaper article as follows:

> On a long trudge through history…very soon everyone runs out of ancestors and has to share them.
>
> As a result, almost every Briton is a descendant of Viking hordes, Roman legions, African migrants, Indian Brahmins, or anyone else they fancy.

His colleague Mark Thomas, a leading geneticist, raises the commercial and business implications of the commercialisation of genetic tests thus: ‘These claims [e.g. about the revelatory powers of the tests] are usually planted by the companies that provide these so-called tests and are not backed up by published scientific research. This is business, and the business is genetic astrology’.

I turn now to the detail of the posts commenting on the original article.

British indigeneity

Let me begin my analysis by considering the words of the commentator that I call ‘Phone’.

> This is an interesting example, I suggest, of how academics, where they can, seek to rationalise and defend state ideology.
>
> In medieval times it was church ideology which they rationalised and defended, now it is the ideology of post-racial multiculturalism, of "one-human-racism", of "colour-blindness", or whatever one cares to call it, which forms the basis of the state’s claim to moral authority and power by denying, demonising and suppressing as "racist" the natural ethnic/genetic basis of national identity.
>
> Academic blindness and servility to the state and its political elite is hardly surprising, in view of their dependency on them for their livelihoods and relatively high social status…
>
> Recommended by 32 people

PLASTIC

What a load of nonsense.

Recommended by 6 people

PHONE

…. think about it a bit and you will find that it does make at least some sense, and is certainly worth pursuing, rather than dismissing out of hand.

Phone also writes the following post:

DNA ancestry tests branded “meaningless”

Thank goodness for that! We wouldn't want DNA profiles reinforcing people’s sense of genetic/ethnic identity and thereby undermining our multi-ethnic, pseudo-nation state identity, would we...?

Just imagine if native Britons were to get it into their silly little heads that they are more closely related to other native Europeans (Scandinavians, Germans, French, Poles, etc.) than to ethnic minority Britons from the third world . . . That wouldn't do at all, would it . . ? ….

Recommended by 49 people

The relations this commentator claims to discern between science, politics, religion, history and geography, combined with the ironic tone of his/her narrative works to articulate a geneticised image of 'native' British descent as racially white and geographically European without explicitly asserting it. It is striking that the rationale supporting this commentator's positioning of ethnic minority Britons' 'origins' in the so-called 'third world' echoes Bodmer's and his team's focus upon ancient British origins rather than more recent slave and colonial histories that intimately connect Black and Asian Britons to genealogies of Britishness (Cross, 2001; Fortier, 2012). Both Phone's account and scientific research on genetic ancestry in Britain uphold the idea, albeit expressed in different ways, that ethnic minorities might be British, but they are not 'native', that is to say 'indigenous'. In this post, the findings of genetic ancestry testing is explicitly put to work to problematize 'ethnic minority' people's identities vis-à-vis Britishness, whereas non-British white European people's identities and ancestries, including French, German and Polish peoples, are said to be more closely related to those of white Britons. This resembles the imagery of homogeneity and diversity in Bodmer's work whereby Britain is represented regionally and ethnically heterogeneous in terms of ancient Nordic European ancestries of descent but yet is also uniformly racially white (Nash, 2013). Clearly, then, Phone's depiction of 'Britishness-as-Europeanness-as-whiteness' (Fortier, 2012: 167), like Bodmer and his team's research and its public dissemination, rests on attention to ancient histories of Britishness that support the idea of British indigeneity as 'just' white and European.

Phone prefaces his account with a mocking critique of those scientists that expose the scientific pretensions of genetic tests. In this way, Phone

implies that ‘proper’ scientific knowledge and practice is rational, objective and detached from the social world that produced it, especially the state and its supposed support of multiracial politics. While Phone thinks genetic ancestry tests offer a counter-narrative to state led multicultural policies, some white American nationalists studied by Panofsky and Donovan (2019: 666-67) believed mixed-race genetic ancestry test results supported ‘multicultural’ values that ‘attacked’ them. They suggested that these tests were produced by companies led by scientists who had an ‘anti-white bias’, including a ‘pro-multiculturalism agenda’ that ‘empowers’ governments to monitor whites (2019: 666). Clearly, the idea that ‘native’ British descent and American ancestry is racially white is framed in contrasting and overlapping ways through the expression of ideas about the supposed neutrality of ‘proper’ scientific practices as beyond politics and power, associated in this instance with multicultural ideologies. As Cross (2001: 431) argues in her critique of Bodmer’s work, this view of science as neutral becomes embroiled with practices that links science to the power and privileges of whiteness.

Further permutations of this approach to science, politics and British descent are exhibited by a commentator that I shall call ‘Sammie.’

> Steve Jones is a life-long Labour Party member and race-denier. During the 1990s he … did his damnedest to prevent our people from knowing they are indeed a people, and not Africans and Asians.
> When the genome was cracked and then, when genetic structure began to be better understood, that kind of politicised gene-talk was swept away…..

Recommended by 4 people

In this post, the imagery of Steve Jones as a ‘Labour Party member and race denier’ is entwined with claims about modern genetic science that, contra Jones, is thought to be supportive of the commentator’s belief that ‘our people’ are not ‘Africans and Asians’. The identification of ‘our people’ as not ‘African’ and ‘Asian’ comes to do the work of marking out ‘visible’ and racialised ‘Others’ as ‘not us’. The use of the possessive pronoun ‘our’ constructs ‘us’ as white, thus positioning and assuming those of the readers that are white will identify with the claim. As in Phone’s post, then, the linking and identification of people with specific geographical areas in terms of genomic homelands (e.g. Europe, Africa, Asia) is deployed to produce differences that divide and separate people into racialized groups without reference to attributes commonly associated with ideas of racial difference, such as skin colour and cultural differences.

Furthermore, the representation of ‘the genome’ and ‘genetic structure’ as something to be ‘cracked’ and ‘understood’ suggests a ‘matter of factness’ (Latour, 2005, cited in M’Charek, 2010: 318) to genomic science that adds weight to the unmarked whitening of ‘our people’ as ‘not Africans’ and ‘Asians’. Indeed, like Phone, this commentator thinks that Jones’ scientific practice is distorted by his political ideology and motivations. For Sammie the consequence of Jones’ ‘left-wing’ politics is to deny ‘our people’ access to knowledge about their origins and identity. This gives the impression that whites have been the ‘victims’ of left-wing politics (see also Panofsky and Donovan, 2019: 674). It would appear, then, that knowledge of genetic ancestry offered by these tests becomes the rightful ‘property’ of whites (Reardon and Tallbear,

2012: 238) that repairs this sense of injustice and encompasses knowledge about who ‘we’ are that takes meaning in relation to who ‘we’ are not.

A commentator that I shall call ‘Viking2000’ takes these ideas further by attempting to discredit the scientists referred to in the newspaper piece by associating them with supposedly threatening Others, namely, ‘Asians’, ‘Poles’ and ‘EU brainwashers’. This commentator writes:

> Various TV documentary programmes (eg on the BBC) have used mass DNA testing of towns in the North East (eg Grimsby?), to find, for example, people related to Vikings! How do they manage to do that then, if it doesn't work?
>
> Surely if someone's DNA has FAR MORE traces resembling Nordic tribes' DNA, then one could say that that person has ancestors from Scandinavia! It's pretty obvious and basic work, I would have thought!
>
> Who are these 'scientists' warning us about DNA testing? Asians or Poles or EU brainwashers, or what?
>
> Recommended by 15 people

In this instance, the racial whitening of a geneticised notion of British descent emerges and is made present in its absence via the evocation of televisual images that link Northern English towns with ancient Viking Scandinavian ancestry. Indeed, this imagery is once more reminiscent of Bodmer’s research aired on the BBC and Channel 4 (see Cross, 2001; Fortier, 2012). Like towns in the north east of England, the places that feature in Bodmer’s documentaries as the home-places of indigenous Britons, are

predominantly white in terms of population profile and set some distance apart from multicultural urban areas of the UK (Fortier, 2012). The assertion that this research is broadcast on 'the BBC' and is 'pretty obvious and basic work' seeks legitimacy for the racialized image that the commentator uses to blur regional belonging with national and genetic identity. Cross (2001: 427) argues in the televisation of Bodmer's research that whiteness is the un(re)marked factor linking these local and national scales of belonging with ancient Scandinavian identity and genetic descent.

The depiction of British descent as purely white is further reinforced by Viking2000's speculation that the critical scientists that are referred to in the newspaper piece must be 'Asians or Poles or EU brainwashers', i.e. threatening Others who are discredited in virtue of their identity. As with the previous commentators, we see a focus on visibly racialized minorities (e.g. 'Asians'). However, in this post those identified as nationally (e.g. 'Poles'), politically and morally (e.g. 'EU Brainwashers') oppositional to ideals of white Britishness are also placed outside of the Scandinavian genomic homelands that are thought to constitute contemporary Britishness. One consequence of this narrative is not only that Britain's colonial past and its legacies for the multiracial constitution of contemporary Britishness are screened out, but also the displacement of contemporary Eastern European immigrants' and Other EU nationals' claims to belong to a racially white notion of Scandinavian indigeneity. This is clearly a contrast to Phone's construction of British indigeneity that was more in tune with Bodmer's approach which emphasises the European heterogeneity of Britain's ancient descent (Nash, 2013). The paradox here is that Scandinavians from 'Nordic tribes' themselves were once immigrants to Britain, highlighting the

genealogical absorption of some migrants and their descendants into the national story, alongside the simultaneous rejection of postcolonial and contemporary European migrants to the UK.

These reflections on which Europeans are thought to be authentically British are particularly salient in the face of public debates concerning the rights of EU nationals to live and work in the UK now that Britain has left the European Union. This raises the question of how the politics of Brexit has been shaped and influenced by ideas of British indigeneity and shared human descent, a point I shall return to in the conclusion.

To summarise this section on British indigeneity, it is clear that these commentators mobilise their views on multiculturalism, science and politics to narrate a geneticised notion of British descent that is motivated by a homing desire that equates 'Britishness-as-Europeanness-as-whiteness' (Fortier, 2012: 167). My argument is that the focus on ancient British ancestries of descent screen out the more recent multiracial histories of slavery and empire that constitute contemporary genealogies of Britishness. The consequence of this is to position ethnic minority Britons outside of ancestries of Britishness. In this regard, these posts highlight not only the insidious ways in which 'virtual racism' is 'routinely' articulated on the internet (Gilroy, 2012) but also how it can go un-noticed and made to appear respectable when shrouded in and hidden behind the language of science.

I turn now to examination of those posts that express an opposing discourse in favour of the idea of common human descent. My contention will be that although the 'common humanity' posts have an explicitly anti-racist orientation, they too end up trading images and ideas about politics, science,

ancestry, geography and history that serve to contribute to the reproduction of the power and privilege that is insidiously embedded within white racial identity.

Shared human descent

I begin with ‘Paul20’ who writes:

> While attending a job interview, I recall several panel members peering at me across the table in a faintly bemused manner. One could not resist a query about the Equal Opportunities section of my application, in which I had ticked the box’indicating ethnic origin as ‘Other’ and entered ‘Congolese’ on the dotted line below. One old chap -- a dead ringer for 'the Major' [a white ageing upper middle class member of the establishment] in Fawlty Towers [the famous 1970s situation comedy on British television] -- ventured, hesitatingly “but y-you don't look terribly...er, Congolese”, to which I replied “None of us do, but Central Africa remains the cradle of civilisation”. The Major appeared happy enough. ‘Well, we needed an African applicant, but I'm not quite sure the panel was expecting one quite so pale”! So much for genetics.
>
> Recommended by 9 people

In this post, knowledge of genetic ancestry is thought to offer information about common African identity that unites not only ‘native’ Britons but the whole of humanity via common ancestral origins that are said to derive from the shared homeland of ‘Central Africa’. Echoing the popularisation of the Genographic Project, Paul20 evokes ‘the out of Africa thesis’ (Nash, 2007), that

presupposes that it is not Britain's exploitative and brutal histories of slavery and empire that genealogically unite Britons and Africans but rather sanitised pre-colonial ancestries of descent (Nash, 2007). Moreover, like the commentators on British indigeneity, we can see how in this post white racial identity becomes visible through evocation of geographies of African-ness. That is to say, the white racial identity of this commentator becomes apparent in the depiction of him as having 'pale skin' and not 'looking Congolese' or of 'African' descent. Indeed, Paul20 comments that 'none of us' look Congolese, thereby suggesting that the people featured in his vignette are also white.

While the white British upper class identity of the Major in this story is a source of humour, this figure serves the purpose of enabling the commentator to address common-sense assumptions about the inheritance of racial, ethnic and national identities. The Major assumed that a 'pale' man cannot be Congolese or of African descent. On the one hand, the commentator maintains that genetic ancestry testing complicates commonplace assumptions about the correlation between physical appearance marked here by skin colour and racial, ethnic and national descent. But on the other hand, this post raises some of the same problems contained in the liberal and anti-racist claims that are based on the molecular 'mixed-raced' ancestries produced by ancestry tests. From the point of view of the Major in the poster's vignette, the employment of a 'pale' man who claims African origins fulfils equal opportunity objectives in his organisation. This of course does nothing to challenge the reality of white male hegemony in the public sphere of work. This reminds me of the insights of scholars working in the USA (Reardon, 2012; Reardon and Tallbear, 2012) and Brazil (Santos et al, 2009) who have observed that one of the consequences of

the commercialisation of genetic ancestry tests is to individualise race. This individualisation makes knowledge of diverse racial identities and origins into white people's genetic property, which then enables them to claim resources that are reserved for ethnic minorities (Reardon and Tallbear, 2012; see also Leroux's [2019] work on French Quebecois' claims to an indigenous ancestry and identity that they deploy to counter First Nation people's rightful claims to land). As Roth and Ivemark (2018) suggest this ability of whites to deploy test results to masquerade under a new social identity is a form of racial privilege.

In sum, then, it would seem that this commentator, in parallel with aspects of the Genographic Project, mobilises the idea of pan-human African origins for the liberal and well-intentioned aim of building bridges across perceived racial, ethnic and national differences (Nash, 2007; Reardon and Tallbear, 2012). While some readers of this article might think he succeeded, I have shown how this commentator evokes images of geneticised pan-human ancient African descent to unwittingly reproduce the very racial differences, hierarchies and inequalities he purportedly sought to break down. These themes are also articulated in the next post to be presented.

Evoking the 'Out of Africa' thesis, 'Listener' writes the following:

> You don't need a DNA test to tell you if you are related to Richard III or Jack the Ripper.
>
> After all we ALL share common ancestors from Africa and so one is related to Richard III, Jack the Ripper, Mahatma Ghandi, Hitler, et al and the other teeming billions!

So when the Nazi scum slaughtered ALL those people in WW-II all they did was murder their kin!

So think about it when you CAMPAIGN against denying AID to the starving cousins in Africa!

So that's why they call it the family of man?

Recommended by 10 people

For Listener, shared origins to African homelands connect the 'family of man', which is identified with iconic good and bad male figures across racial, ethnic, religious and national identities and from different periods of historical time and geographical space. Thus we have a picture of the fifteenth century English King Richard III related to the twentieth century icon Mahatma Gandhi, and the picture of German Nazis related to their Jewish victims. Like Paul20's emphasis on common African descent, the logic underpinning this narrative of a shared genomic homeland resonates with the Genographic Project's concern to highlight a '…newly recognised global biological closeness' that 'will dissolve antipathy to difference' (Nash, 2007: 87). Indeed, for this commentator the idea of ancient genealogical relatedness to Africa seems to be so obvious and universal in its relevance to human beings across historical time and socio-cultural and national contexts that genetic ancestry testing is redundant.

Once more in parallel with the social scientific critiques of the Genographic Project and Bodmer's work, the histories of Western slavery and colonialism are displaced in this commentator's narrative of human descent. While Mahatma Gandhi – who famously campaigned for the end of British colonial rule in India – features in this 'family tree', it is the DNA of ancient

African populations that unites this family. In this way, the histories of European colonialism, including British colonialism evoked by the reference to Gandhi, are rendered mere traces. Moreover, a de-politicised and romanticised model of African descent is produced in this post, one that mirrors the archaic racist language and thought that positions Africans as 'primitive' in the Genographic Project (Nash, 2007). This also displaces the histories of slavery and subsequent political economies of historic and contemporary migrations that connect Africans genealogically to the West.

It is also worth exploring how the invitation to '…think about it when you CAMPAIGN against denying AID to the starving cousins in Africa!' positions the audience that this commentator addresses as Western and affluent, a disposition that takes meaning within the global context of white Western political and economic hegemony. There is also a sense of 'superior benevolence' infused within this statement that denies Africans their agency; rather it is in 'our' power to save 'them' (Cross, 2001: 433). Cross (2001) comments in her reflections on media representations of the Human Genome Diversity Project, the forerunner of the Genographic Project, that this Western expression of benevolence towards non-Western racialized Others is embroiled in a contemporary politics of liberal-humanism that is 'deeply implicated in the racialized history and politics of the West's imperial-colonial dominance' (Cross, 2001: 433). In this way, and like the sociological critique of both Bodmer's research and the Genographic Project, this commentator articulates 'anti-racist sentiments in a framework marked by whiteness' (Cross, 2001: 434).

Conclusion: genetic ancestry and the limits of anti-racism

In this article I have drawn on a British-based case study to scrutinise commentators' responses to population geneticists' critique of the commercialisation of genetic ancestry tests. This case study has enabled me to advance and develop the current social scientific critique of high-profile genetic projects widely disseminated in the media (Nash 2015, 2007; Reardon and Tallbear, 2012; Fortier, 2013; Cross 2001). I have drawn on this critique to show how the images, ideas and logics underpinning the popularisation in books and television documentaries of Bodmer's research and the Genographic Project reoccur in the accounts of people who are not scientists. In so doing, I have contributed to current understandings of how 'liberal', 'democratic' and 'anti-racist' (Reardon, 2012) approaches to genomic science in the media and popular culture may unintentionally support the reproduction of everyday discourses of race and racism.

My case study has also provided new data and analytical insight into the as yet under-explored ways in which ideas of indigeneity, race, ethnicity, nation, multiculturalism, empire, science and politics mediate everyday engagements with genetic ancestry testing in the UK. My account has shown how both the commentators of 'British indigeneity' and 'shared human descent' accept genetic ancestry tests as legitimate science that yields 'facts' about racial ancestry and descent. However, they each interpret the 'received-facts' to 'self-fashion' identities in ways that resonate with their social and political worldviews on questions of racial and national belonging (Nelson, 2016). Advocates of 'British indigeneity' deploy genetic ancestry testing to reproduce the idea that national British ancestry is racially white in the face of supposedly problematic

multicultural state policies and ideologies. In apparent contrast, advocates of 'shared human descent' deploy these tests to claim racially inclusive mixed-race ancestries and identities. I have traced the diverse ways in which both these discourses of ancestry and descent reproduce racial hierarchies and distinctions that support white power and privilege.

To draw out further the significance of these commentaries for what they reveal about everyday constructions of British ancestry, I would like to end by evoking public discourses surrounding aspects of Britain's decision to leave the European Union. While the newspaper article and commentary that served as my case study was published before the UK's referendum on membership of the European Union, it is significant and uncanny that the discourses of British indigeneity and shared human descent that I have explored here foreshadow some of the arguments proposed in the public campaigns for Britain to leave the European Union. This might not be surprising given that *The Telegraph* newspaper campaigned for Britain to leave the EU.

An aspect of the leave campaign was the idea that Britain should reclaim 'sovereignty' and 'independence' from the European Union, and so open the way for a newly formed 'Global Britain' to reconnect with the world on its own terms (Virdee and McGreever, 2017). The latter includes regenerating long standing ties with the Commonwealth countries of Canada, Australia, New Zealand and some African nations (Virdee and McGreever, 2017: 1805). Social scientists have argued that a nostalgic image of Britishness fuelled this aspect of the leave campaign, driven by a lack of knowledge of the violence and racism that shaped Britain's imperial history, and presupposed an image of Britishness that signals a post-imperial nation that has not yet come to terms with its place

in the postcolonial world order (see for example, Dorling and Tomlinson, 2019). Moreover, Virdee and McGreever (2017: 1805) argue that this image of Global Britain also ignores 'how this legacy of Empire continues to shape the uneven development of global capitalism in the present, forcing parts of these populations to migrate to western economies as a racialized reserve army of labour'. It seems to me that this analysis of the forgetting of the brutalities and legacies of Britain's imperial past and a nostalgia for an idealised notion of Britishness also underpins the discourses of British indigeneity and shared human descent analysed in my account. This is apparent in the differing ways that the posts displace British multiracial slave and colonial histories to position ethnic minorities in the UK outside of genetic ancestries of Britishness.

Finally it is worth mentioning that my analysis of the posts is significant for what it reveals about the ways in which a critical approach to the power and knowledge of science on the part of the public does not necessarily lead to a liberal, anti-racist and non-authoritarian conception of science. Rather, it can serve to reinforce conservative models of science based on ideas of scientific objectivity and neutrality that are themselves the legacies of European colonialism and the outcome of white Western racial hierarchies, power and privilege. As Reardon (2012: 42) suggests, this scale of analysis takes us a long way from the tendency within sociological and ethnographic accounts of genetic science to argue for either its 'reductive determinism' (Duster, 2003, 2015) or 'democratic possibilities' (Gilroy, 2000). My contention is that a much more sophisticated and nuanced analysis is required that traces and analyses how hierarchical concepts of ethnic, racial and national difference and descent

become present in their absence as they traffic between and become constituted by the fluid domains of science, history, politics and the media.

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